

## **March 25, 2009 – NPP FM5 Reports**

### **CERES RDR Processing**

- No report received.

### **VIIRS Radiance/Geolocation Subsets**

- No report received.

### **Toolkit Issues**

- No report received.

### **Telecon/eRoom/Meeting**

- Attended the bi-weekly SDS telecon March 4 and 18. Reported on SDS Ops. Concept status, SDS/CERES Ls requirements, Land PEATE ICD, and VIIRS sub-sampler code status. Much discussion on interface CLASS/SD3E interface tests and revised test plans. (Closs)
- Attended the biweekly DFWG telecon March 3 and 17. Highlights included a discussion on new sample proxy date due out in early July and the next round of algorithm ECRs in June. (Closs)
- Attended a new Customer Test Data Working Group telecon March 19. The main topics of CLASS test data plans and SI&T were deferred. There was discussion on a MODIS-VIIRS data converter and a test data matrix. (Closs)
- IICDO telecons March 3, 10, and 17 were cancelled. Planned to attend the weekly IICDO telecon March 24. (Closs)

### **System Engineering/Management Topics**

- Made additional changes to the ERB CARS sections of the SDS Operations Concept document. Currently under internal review. (Closs)
- Developed rationale for ERB CARS level 4 requirements to be included in the ERB CARS Science Requirements document. (Closs)
- Updated the appendices for the CERES content in the SDS level 3 requirements spec. (Closs)
- Instrument (SCCR 698) was successfully installed, compiled, and tested on *magneto-P4* and released to the ASDC on February 27. (Ayers)
- The Instrument Operator's Manual and Test Plan associated with SCCR 698 were updated, posted on the Web, and provided to the ASDC. (Saunders)
- Updated Instrument (SCCR 698) source code and scripts were installed and tested on *magneto-P4* to correct problems found during operational testing. (Ayers)
- Working on Version 0.8 of the CERES Requirements Specification. (Ayers, Saunders)
- Edited Section 12 of the NPP SDS System Design Document. (Ayers)

- See [Table 1](#) for SCCR activity since the last DMT meeting. SCCRs that need to be reviewed follow [Table 1](#). (Ayers)

### **Upcoming Meetings**

- No report received.

**Table 1. SCCR Activity February - March 23 at 12:30 p.m.**

<b>SCCR</b>	<b>S</b>	<b>U</b>	<b>A</b>	<b>C</b>	<b>D</b>	<b>SS</b>	<b>Page No.</b>	<b>Comments</b>
702	X					1	4	
703	X					1	6	

**S**=Submitted; **U**=Updated; **A**=Approved; **C**=Closed; **D**=Disapproved; **SS**=Subsystem

## CERES Software Configuration Change Request Submittal

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Subsystem: Instrument      SCCR Date & TIME: 2009-02-19 10:02:33      SCCR No.: 702

Parameter Change: ( ) YES (X) NO

Description of Change (Science):  
Reqt. # 1-29:

Update the existing Ada code to support processing for NPP-FM5. This will create new PGE CER1.1P7.

Update CER1.2P1 to allow FM5 as a valid instrument.

Reason for Change (Science):  
Reqt. # 1-29:

The Ada code will act as a back-up should the C++ conversion be delayed and not ready to support NPP pre-launch tests.

CER1.2P1 may require small updates to allow support for FM5, these updates should be minimal if necessary.

Description of Change (non-Science):  
Reqt. # 1-29:

Add new ASCII file and PCF generators for new PGE CER1.1P7.

There is a possibility that this delivery will be delayed to also add support for the PGEs to run on the new x86 platform for production.

Reason for Change (non-Science):  
Reqt. # 1-29:

New generators needed to support the new PGE.

Updates to the code are needed to support running the PGEs on the new x86 platform. If it is determined that this delivery can be delayed until the x86 is available, then updates to the PGEs will be made to support the little-endian platform. And the code will be delivered to both warlock and the x86.

Parameter(s) and Product(s) Being Changed (Use Name(s) from Data Products Catalog) and Description of Parameter Change:  
N/A

Reason for Parameter Change:  
N/A

Affected PGEs in this Subsystem:  
New CER1.1P7 and CER1.2P1

Estimated Time to Complete Change: 2 wks  
Planned Delivery Date: March 13, 2009

List Affected Subsystems and PGE Names: Instrument, possibly ERBE-like PGE that reads the Pre-ES8

Originator: COOPER, DENISE L. (SSAI)

## CERES Software Configuration Change Request Submittal

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Subsystem: Instrument      SCCR Date & TIME: 2009-02-19 10:10:16      SCCR No.: 703

Parameter Change: ( ) YES (X) NO

Description of Change (Science):

Req. # 1-27:

New PGE CER1.1P8, Build 1.

Reason for Change (Science):

Req. # 1-27:

Delivery of Build 1 of the new C++ code. This code will eventually replace CER1.1P1/3/5 and will be able to process all the instruments including FM5 for NPP. This delivery of Build 1 will include the code to read the Level-0 and process radiances and geolocation. The only output from this build will be QC reports as not all the code to complete radiance conversion and geolocation will be available for this build.

Description of Change (non-Science):

Req. # 1-27:

New ASCII file and PCF generator for PGE CER1.1P8 that will support the creation of the PCF files for Terra, Aqua and NPP.

Reason for Change (non-Science):

Req. # 1-27:

CER1.1P8 will support all platforms and instruments, so the new ASCII file and PCF generator will be a combination of all elements to support this new PGE.

Parameter(s) and Product(s) Being Changed (Use Name(s) from Data Products Catalog) and Description of Parameter Change:

N/A

Reason for Parameter Change:

N/A

Affected PGEs in this Subsystem: New CER1.1P8

Estimated Time to Complete Change: 4 weeks

Planned Delivery Date: April 2009

List Affected Subsystems and PGE Names: Instrument CER1.1P8

Originator: COOPER, DENISE L. (SSAI)

## Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
<b>Early NCT3 - Ground EEO</b>	Scheduled due to slip in NCT3 schedule	09/16/2009 – 10/05/2009	8
<b>Flight Thread Tests</b>	FTTs are used to verify functional requirements contained in the Mission Requirements Specification.		
<ul style="list-style-type: none"> <li>FTT 8</li> </ul>	This test will verify the ingest and validation of selected IDPS (NESDIS) generated RDRs and xDRS (TDRs, EDRs, and SDRs) from ADS in SDS.	07/30/2009 - 08/05/2009	5
<b>Interface Confidence Tests</b>	The ICTs will be discussed at the Test Data Summit, Dec 9-10 at Goddard.		
<ul style="list-style-type: none"> <li>ICT 2</li> </ul>	SDS <-> IDPS – Schweiss requests at least dial in for kick off discussion during the Test Data Summit, Dec 9-10.	06/30/2009 - 07/14/2009	5
<ul style="list-style-type: none"> <li>ICT 4</li> </ul>	ADS/CLASS <-> SDS	06/16/2009 - 06/29/2009	5
<ul style="list-style-type: none"> <li>ICT 23</li> </ul>	SDS <-> NSIPS	05/05/2009 - 05/18/2009	5
<ul style="list-style-type: none"> <li>ICT 24</li> </ul>	SDS <-> LaRC (ASDC)	05/26/2009 - 06/08/2009	5
<b>Mission Rehearsal Tests</b>			
<ul style="list-style-type: none"> <li>MRT3</li> </ul>	Sensor activation and checkout: Sensor activation, Sensor deployments, Mission data handling, & Cal/Val.	Launch - 7 months (06/16/2010 – 06/22/2010)	8
<ul style="list-style-type: none"> <li>MRT4</li> </ul>	Combination of Mission Rehearsal #2 and Mission Rehearsal #3.	Launch - 4 months (09/16/2010 – 09/22/2010)	8
<ul style="list-style-type: none"> <li>MRT4A</li> </ul>	Dress Rehearsal	Launch - 1/2 weeks (01/04/2011 – 01/10/2011)	8
<b>NPP Compatibility Tests</b>	The NCTs exercise flight and ground interaction. Each NCT is comprised of functional thread and interface tests that provide a continuing higher degree of confidence leading up to operational readiness.		
<ul style="list-style-type: none"> <li>NCT3</li> </ul>	This test exercises the flow of data from the satellite through C3S, IDPS, SDS, and to the ADS with the appropriate products being generated at each stage. (This test was previously scheduled to begin on 06/10/2008 and to last for 5 days. The slippage of that schedule led to the “Early NCT3-Ground EEO.”)	02/01/2010 – 02/08/2010	8

### Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
<ul style="list-style-type: none"> <li>NCT4</li> </ul>	This test exercises mission configuration, 3 days in the mission life with all elements of ground segment. This is the final test opportunity with the satellite before shipment to launch facility. (Ref. #1 shows the test duration as 10 days which is apparently an error.)	07/23/2010 – 07/30/2010	8
<b>Operations Readiness Test (ORT)</b>	Verify that the ground system and operations personnel are ready to support the mission.	10/18/2010 – 10/22/2010	8
<b>SDS Function Tests</b>	From the "SDS System Test Schedule" - more info/details to follow.		
<ul style="list-style-type: none"> <li>Land to CERES</li> </ul>		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> <li>CERES to CLASS/ADS</li> </ul>		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> <li>CERES to CasaNOSA</li> </ul>		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> <li>CERES to Science Team</li> </ul>		05/05/2009 - 05/07/2009	6
<ul style="list-style-type: none"> <li>CERES to C3S (WRS)</li> </ul>		05/05/2009 - 05/07/2009	6
<b>NPP Mission Freeze Date</b>	The purpose of this date is to lock-down the mission configuration before launch. The mission freeze date generally applies to major hardware/software items within the ground system and mission operations area such as ground software and hardware. A comprehensive list of items that apply to the launch freeze will be generated by the MOWG.	Launch - 2 months	
<ul style="list-style-type: none"> <li>NPP Launch</li> </ul>		01/16/2011	8

## Upcoming Events

Event/Sub-events	Description	Schedule	Ref No
<b>References:</b>	<ol style="list-style-type: none"> <li>1. SI&amp;T Plan (GSFC 429-03-02-07)</li> <li>2. NPP Mission Operations Management Plan (GSFC 429-04-02-29)</li> <li>3. Mission Rehearsal Test Plan (GSFC 429-04-02-31)</li> <li>4. CERES FM5 on NPP schedule as of 09/30/2008</li> <li>5. NPP_SDS_Schedule_Dec_18_2008.mpp.pdf ... from Mary Hunter's "Thu 12/18/2008 1:40 PM" email (RE: NPP SDS Schedule).</li> <li>6. SDS Functional 2-schedule 12.12.08.xls ... from Vic Buczkowski's "Fri 12/19/2008 10:42 AM" email ([NPP-SDS] SDS Progress-Score Card &amp; Test Schedule).</li> <li>7. C3S Cartoon - Replan Jan – Sept 09. The filename in eRooms is "C3S Cartoon Schedule Replan FY09 r3.ppt" which may be found at <a href="https://collab2.st.northropgrumman.com/eRoom/npoess/CommandControlCommunication/0_29b25d">https://collab2.st.northropgrumman.com/eRoom/npoess/CommandControlCommunication/0_29b25d</a>.</li> <li>8. NPP Schedule – Mission Drivers (NPP Schedule to Launch_012209.mpp via NPP Mission Drivers Schedule_012209_4pg-r1-1.pdf)</li> </ol>		